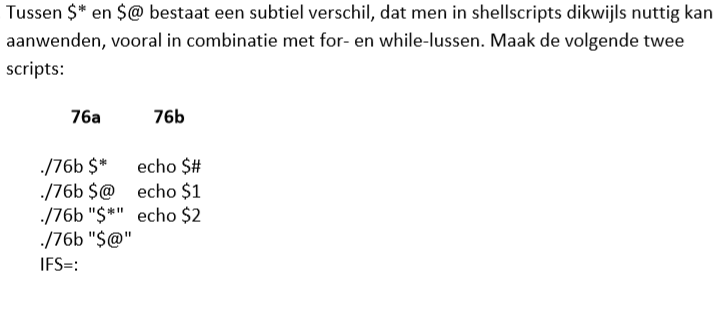
**Besturingssystemen II labo**

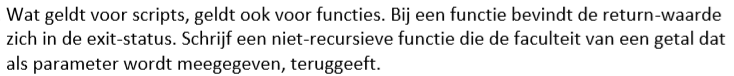
Oef 73

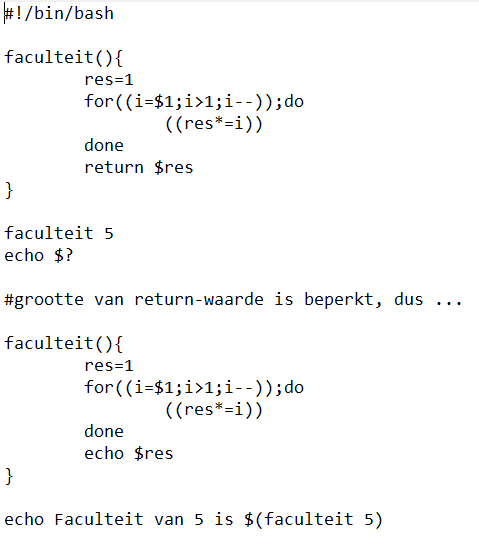
Oef 74





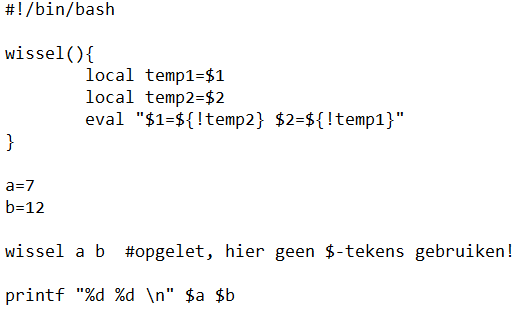
Oef 75



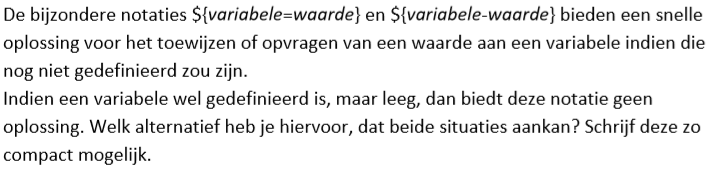


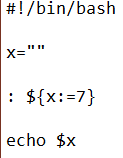
Oef 76



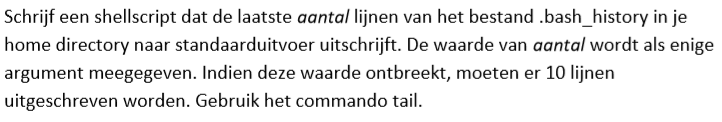


Oef 77

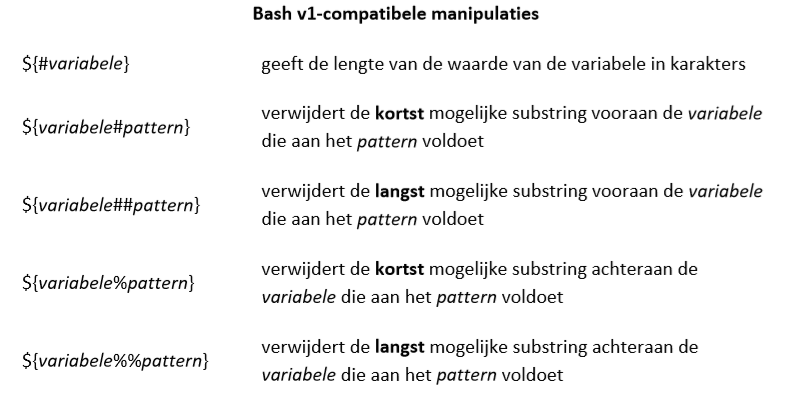


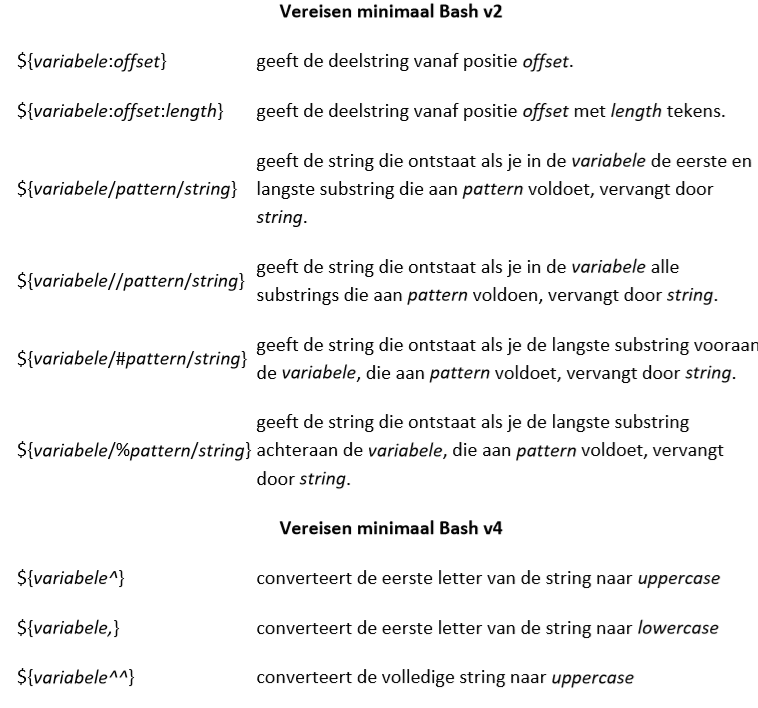


Oef 78

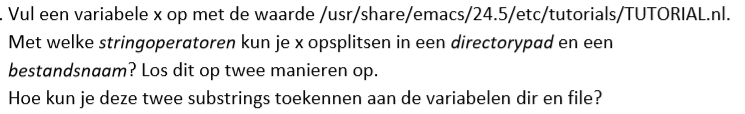


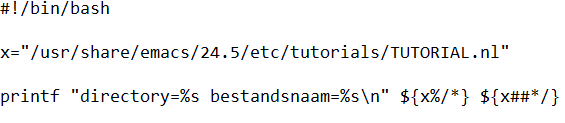




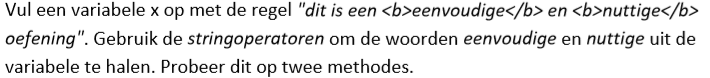


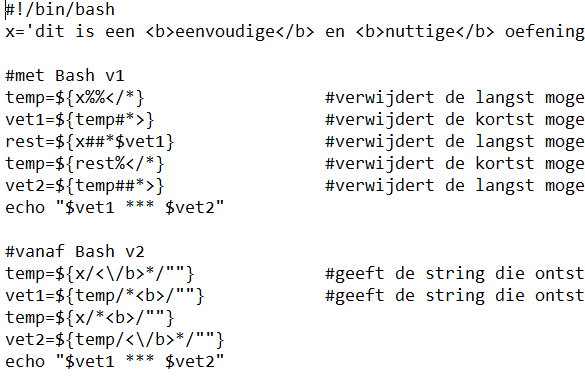
Oef 79



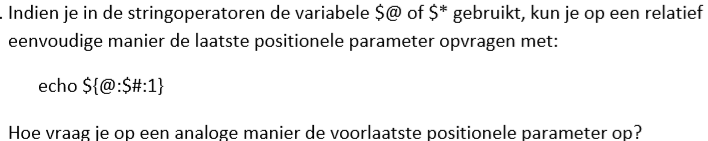


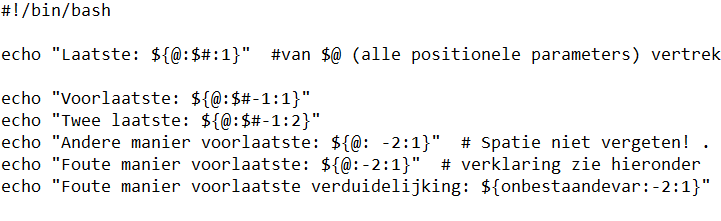
Oef 80



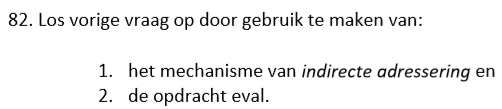


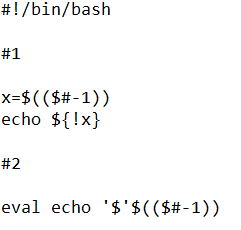
Oef 81





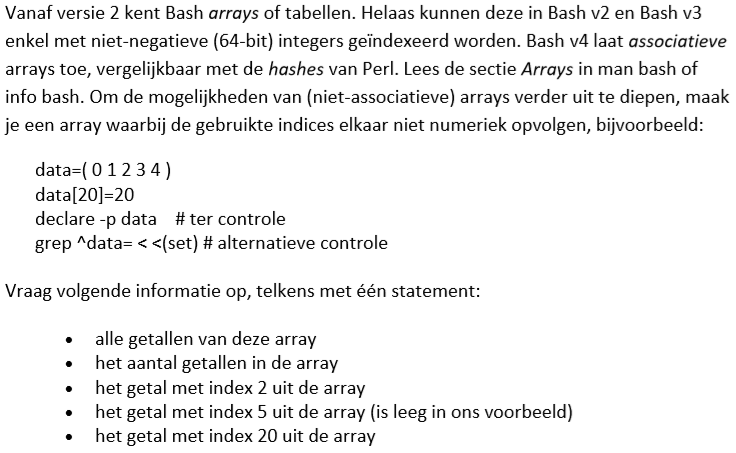
Oef 82

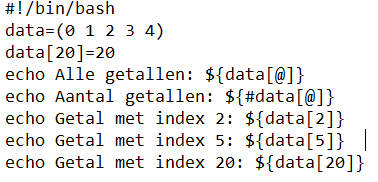




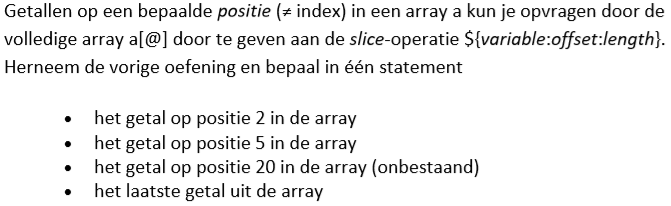
|  |  |
| --- | --- |
| **${!x}** |  |
| **eval** |  |

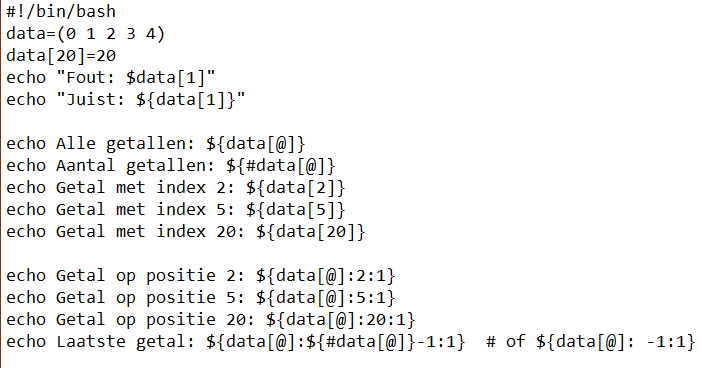
Oef 83



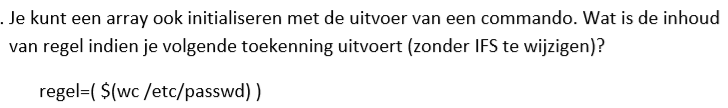


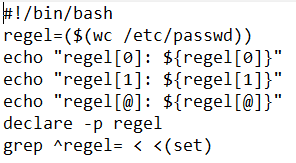
Oef 84



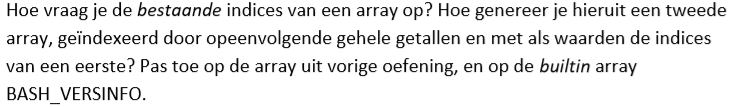


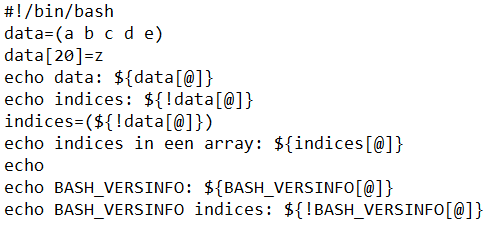
Oef 85



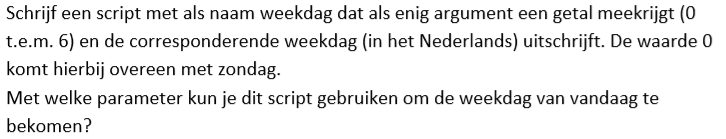


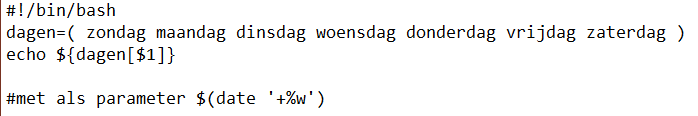
Oef 86





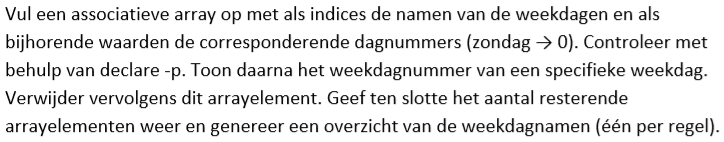
Oef 87

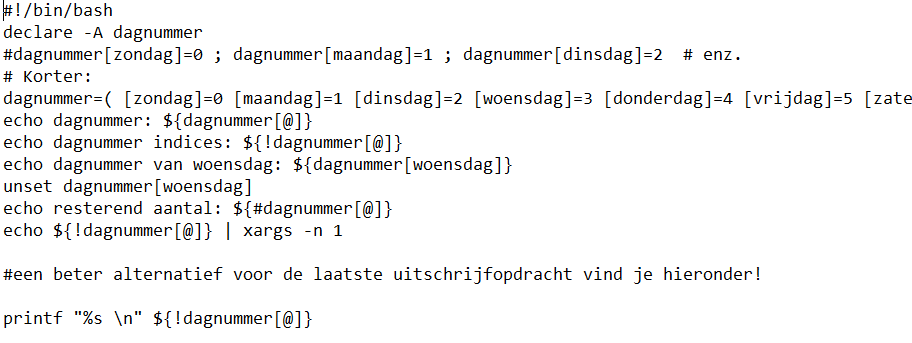




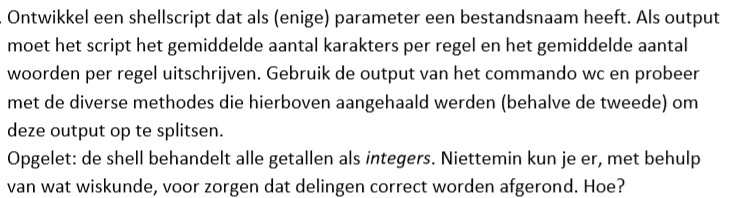
|  |  |
| --- | --- |
| **$(date ‘+%w)** |  |

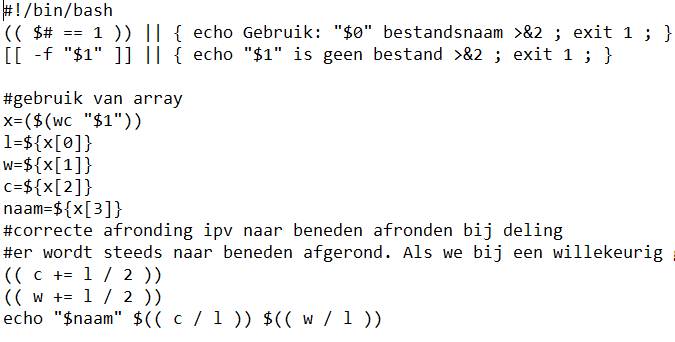
Oef 88





Oef 89

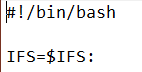




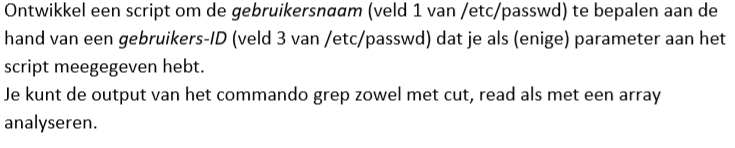
|  |  |
| --- | --- |
| Correct afronden | c/L + 1/2 = (c\*2+L)/(L\*2) = (c + L / 2)/L |
| || = else  && = if |  |

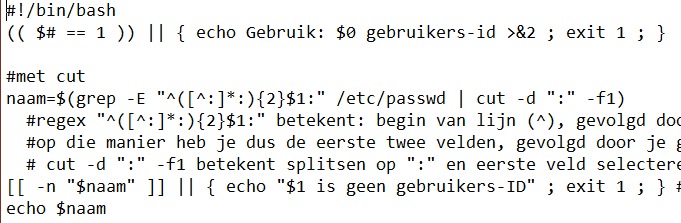
Oef 90

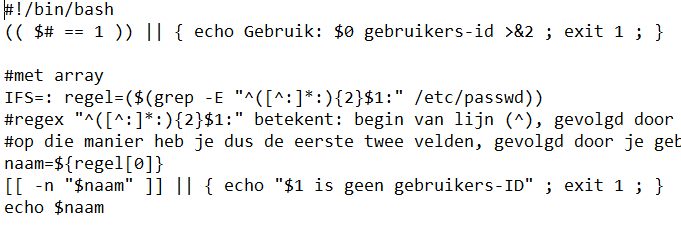


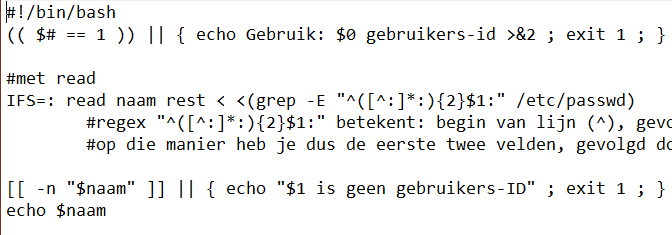


Oef 91

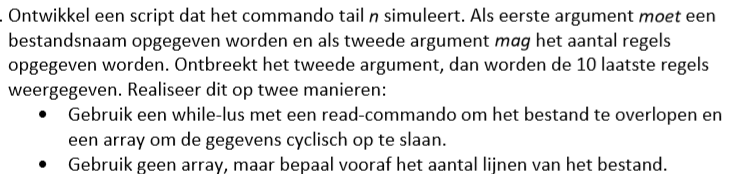


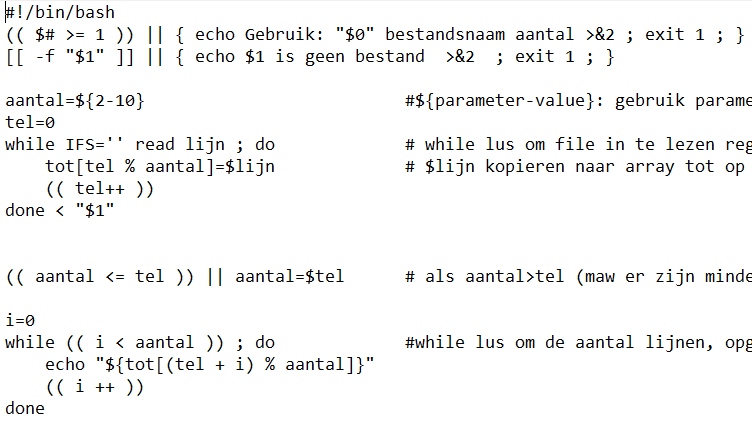


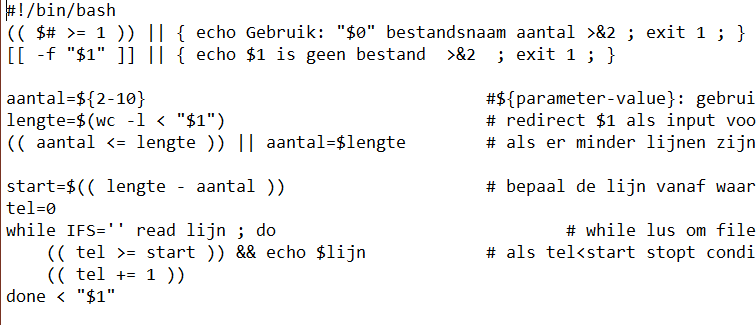




Oef 92



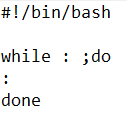




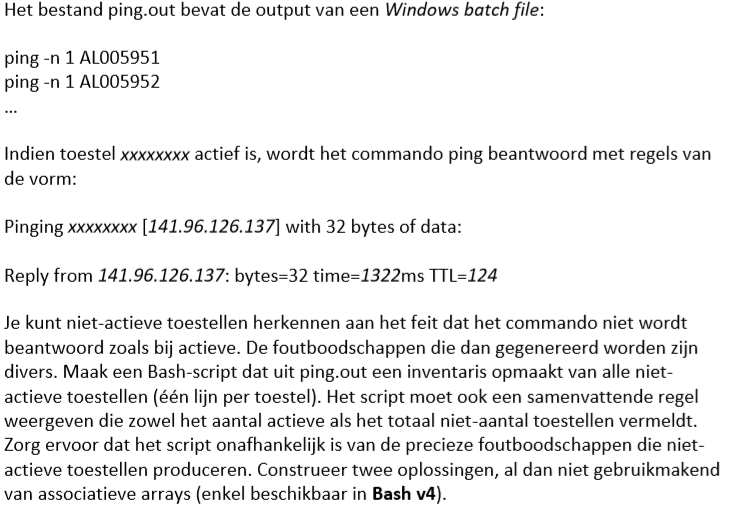
|  |  |
| --- | --- |
| **IFS = ‘’** | Witruimte vooraan niet weglaten |

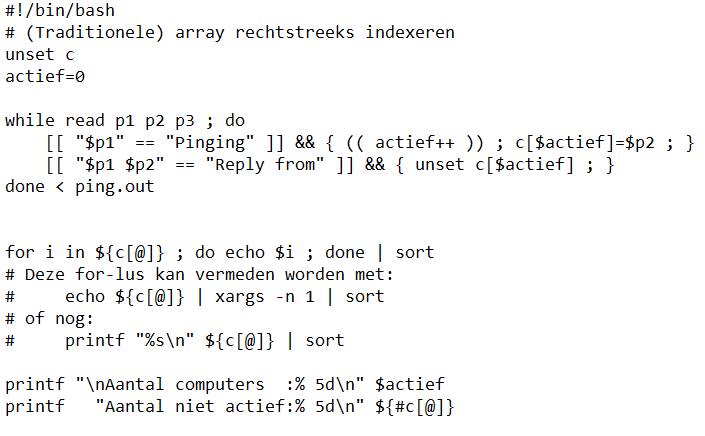
Oef 93

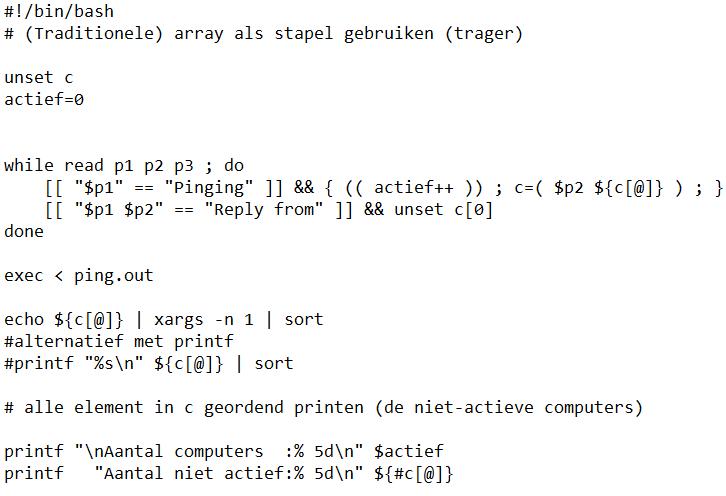


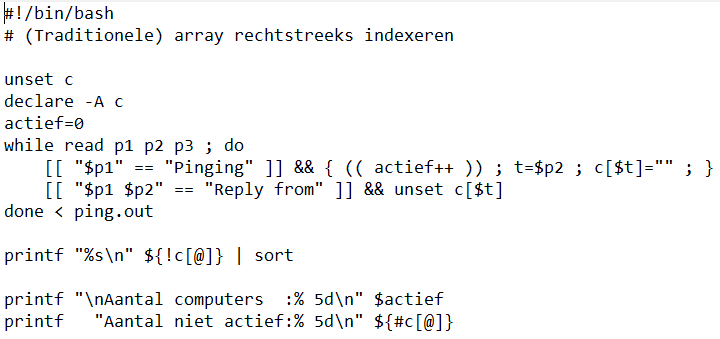


Oef 94



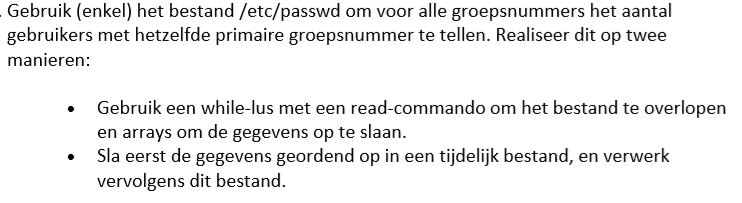


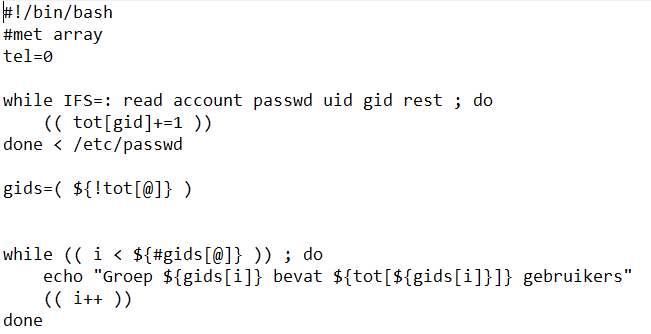


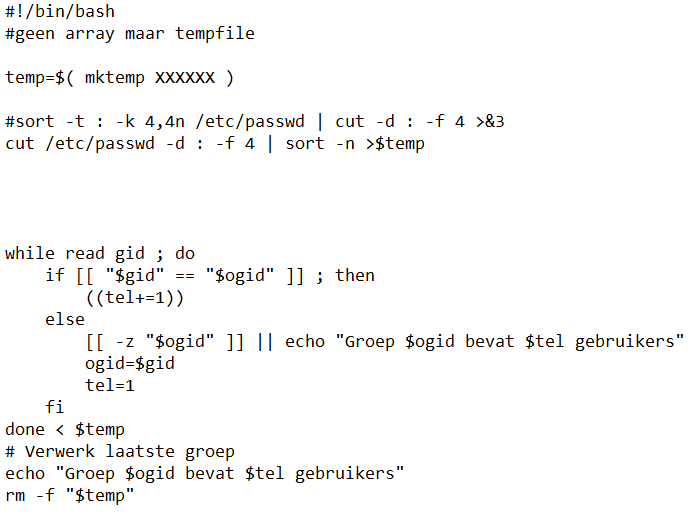


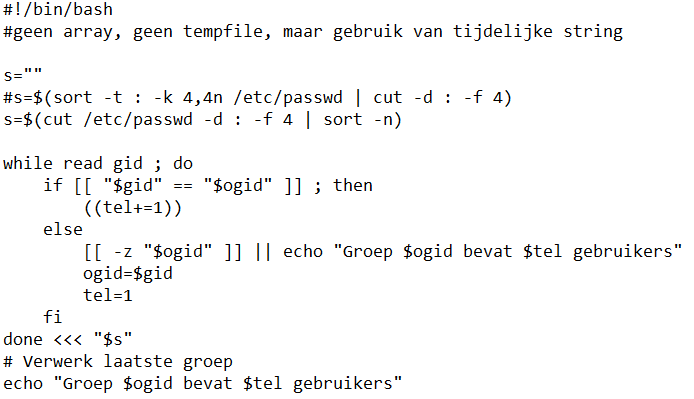
|  |  |
| --- | --- |
| **xargs** |  |

Oef 95



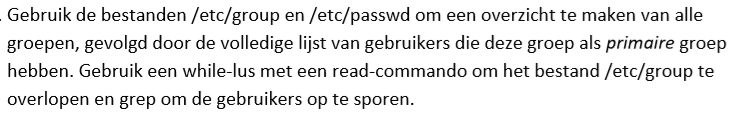


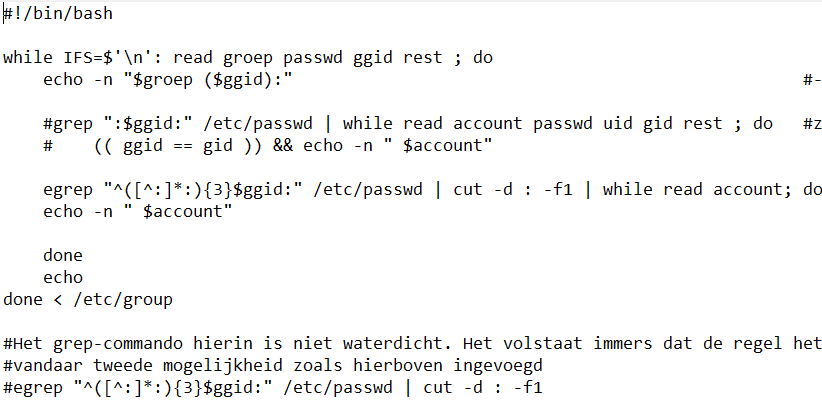


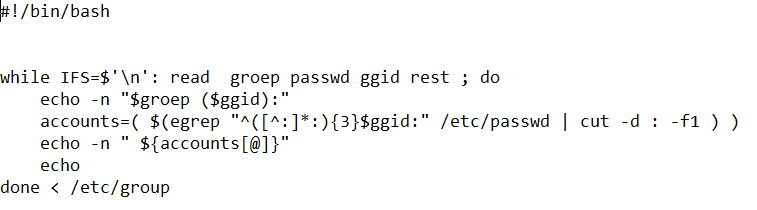


|  |  |
| --- | --- |
| **“$s”** |  |

Oef 96

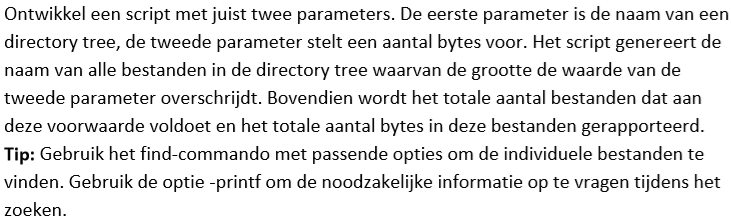


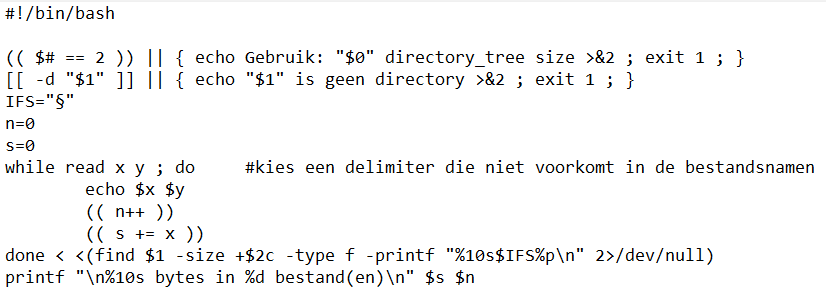




|  |  |
| --- | --- |
| **regex** |  |

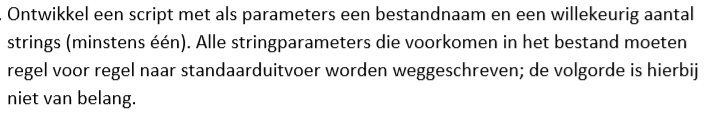
Oef 97

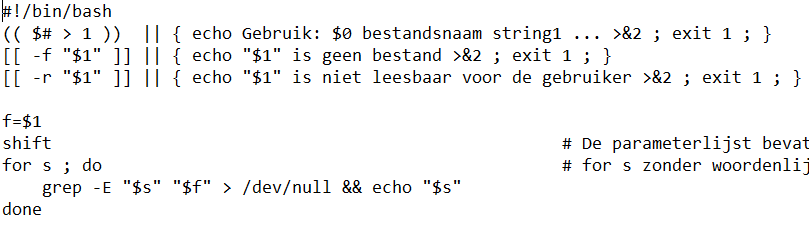




|  |  |
| --- | --- |
| **find** |  |

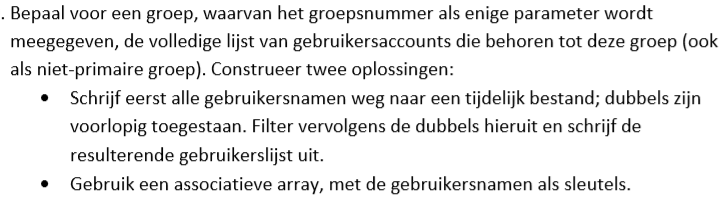
Oef 98

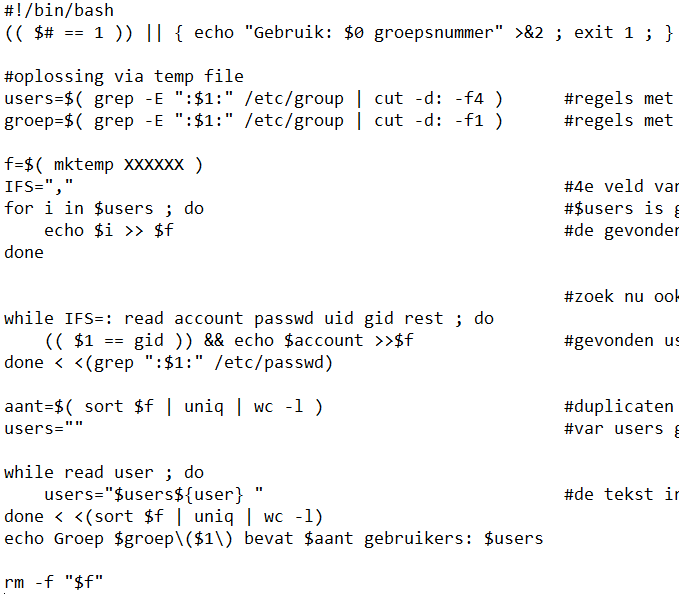


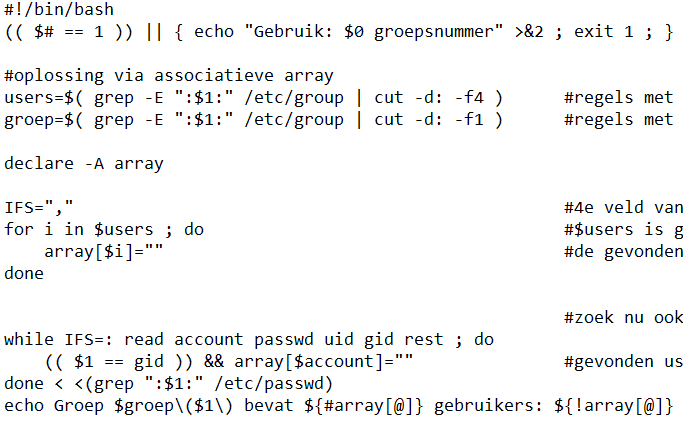


|  |  |
| --- | --- |
| **For lus** |  |

Oef 99

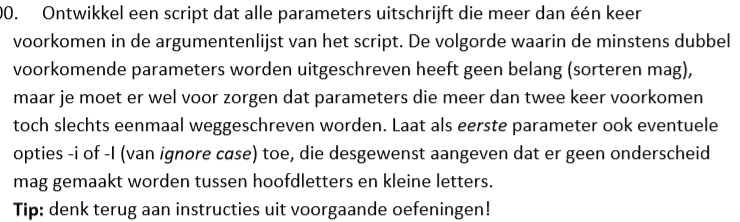


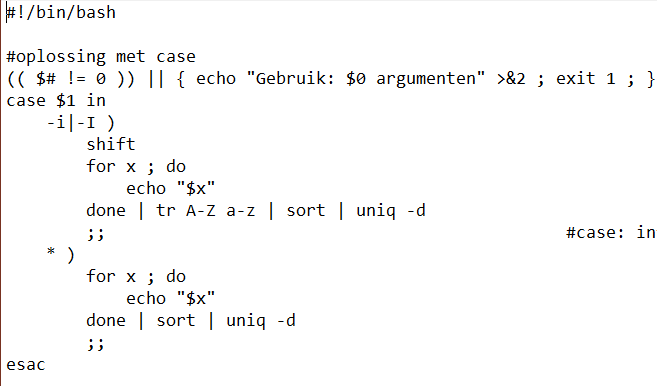


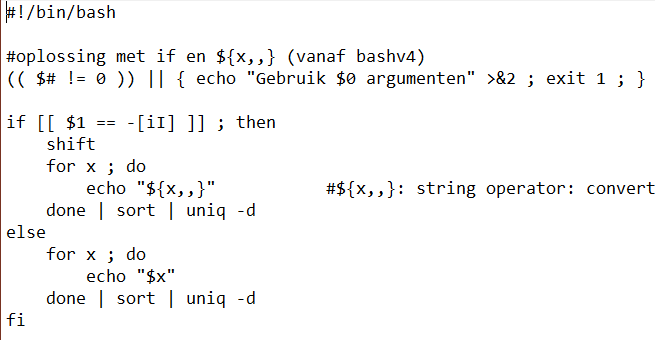


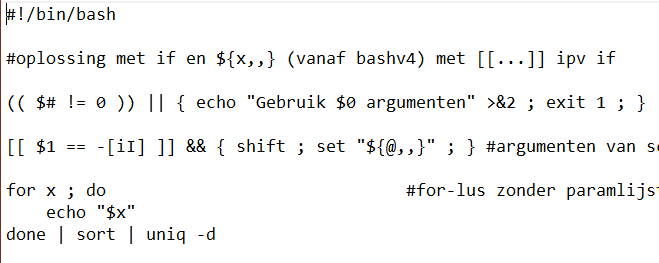
|  |  |
| --- | --- |
| **cut** |  |
| **mktemp** |  |
| **array** |  |

Oef 100



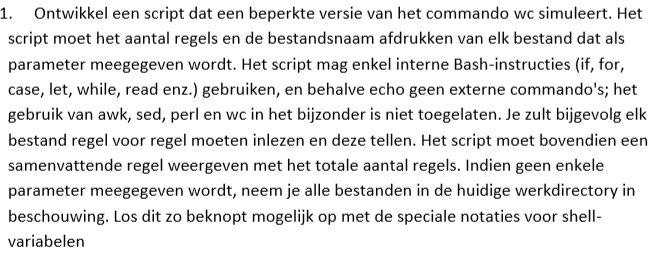


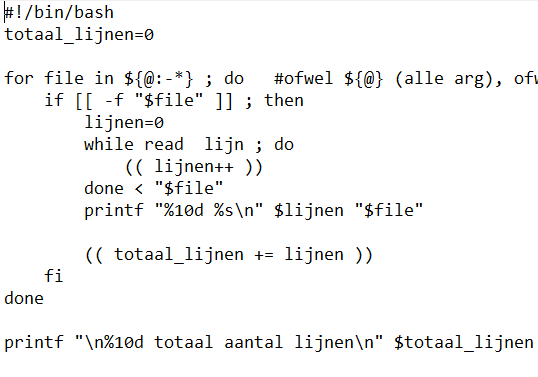




|  |  |
| --- | --- |
| **case** |  |
| **${x,,}** |  |
| **Set “${@,,}”** |  |
| **tr** |  |

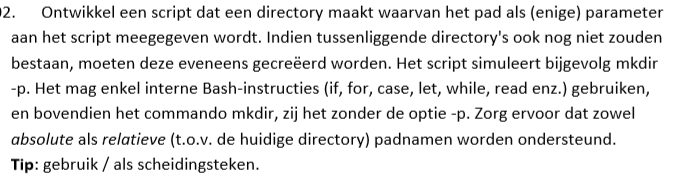
Oef 101

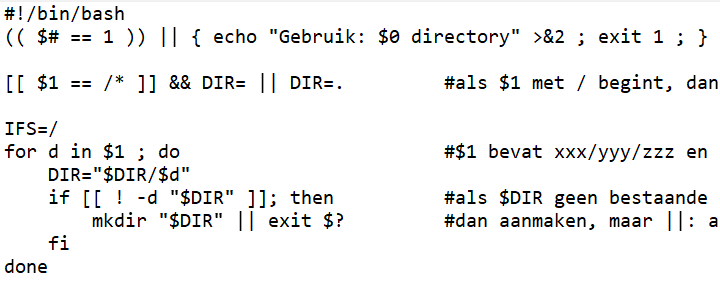




|  |  |
| --- | --- |
| **Pathname expansion** |  |

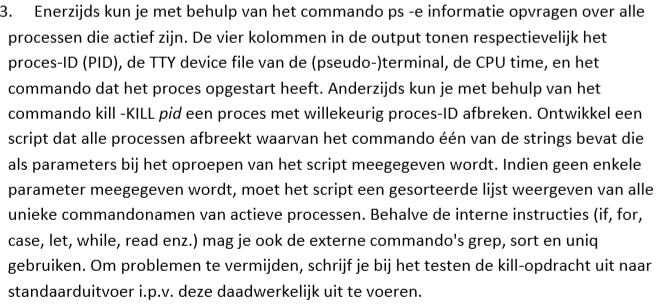
Oef 102

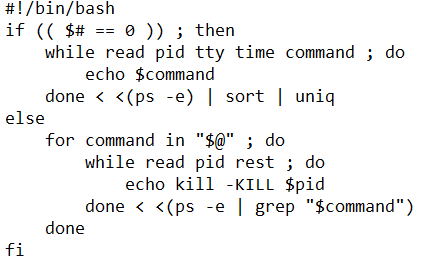




|  |  |
| --- | --- |
| **$?**  **$!** | Returnwaarde laatste commando  Pid laatste proces |

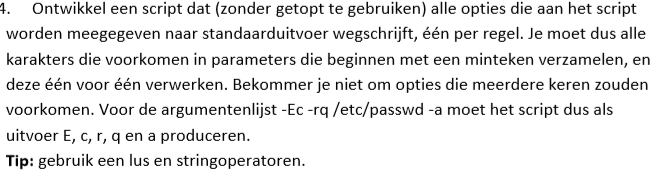
Oef 103

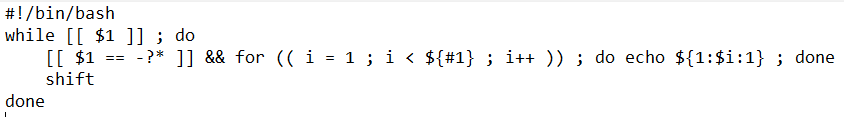


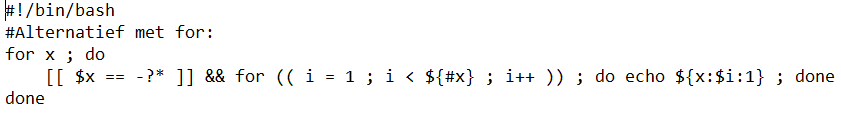


|  |  |
| --- | --- |
| **Kill** |  |
| **ps** |  |

Oef 104

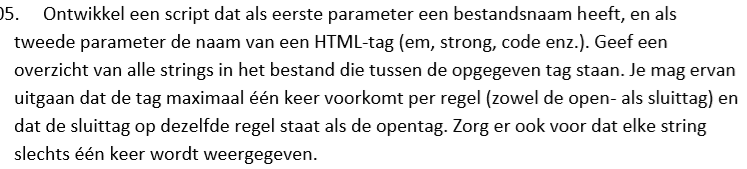


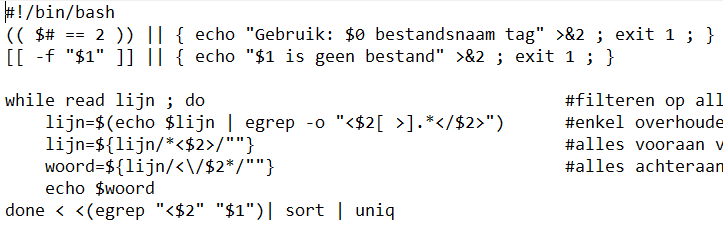


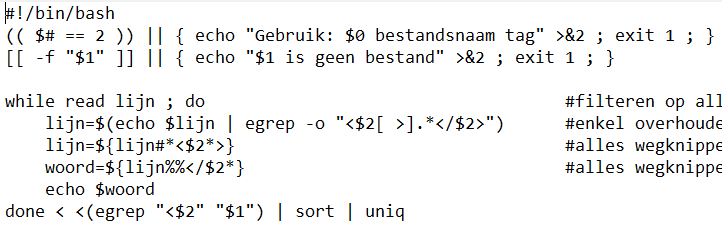


|  |  |
| --- | --- |
| **x** |  |

Oef 105



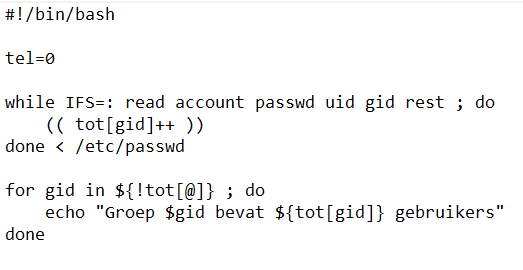




|  |  |
| --- | --- |
| **Sort** |  |
| **uniq** |  |

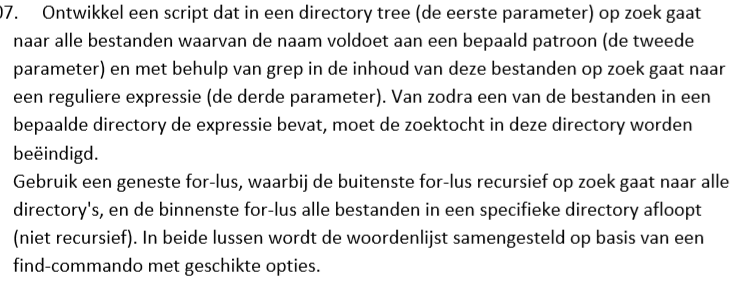
Oef 106

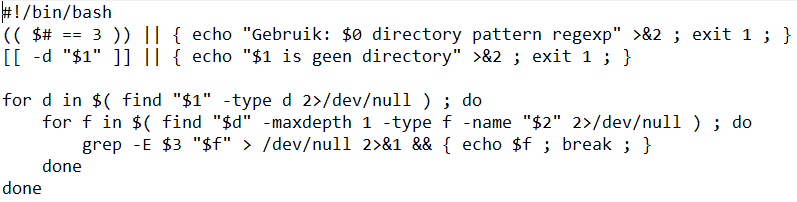




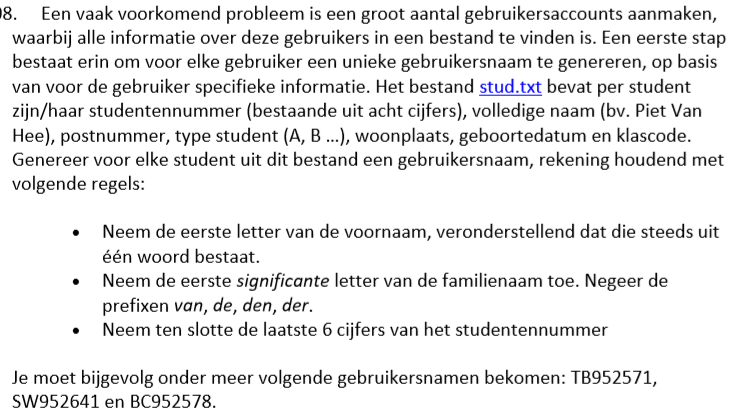
|  |  |
| --- | --- |
| **Array operations** | *Print keys*  ${!array\_name[index]}  *Alle elementen*  ${my\_array[@]}  *Array lengte*  ${#array\_name[@]}  *Voeg toe*  my\_array+=( Cobalt Nickel )  *delete element*  unset my\_array[index] |

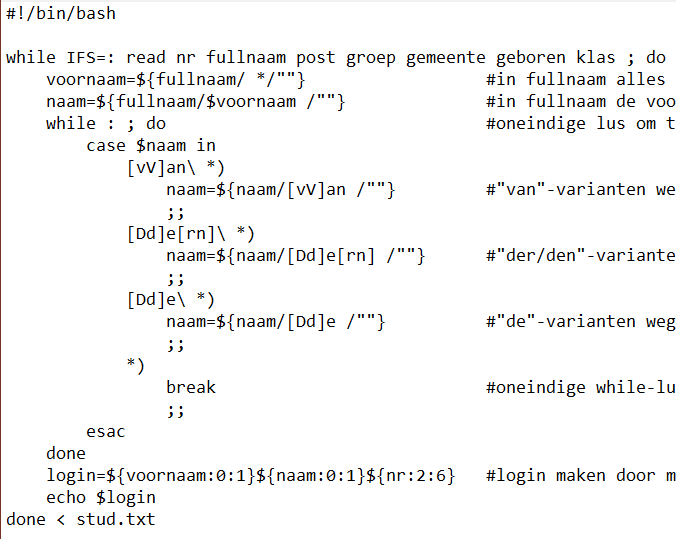
Oef 107





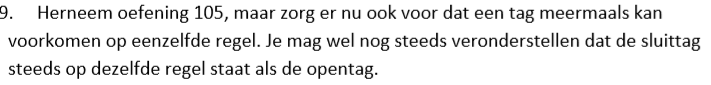
Oef 108





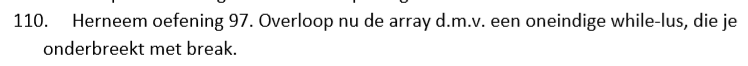
|  |  |
| --- | --- |
| **echo** |  |

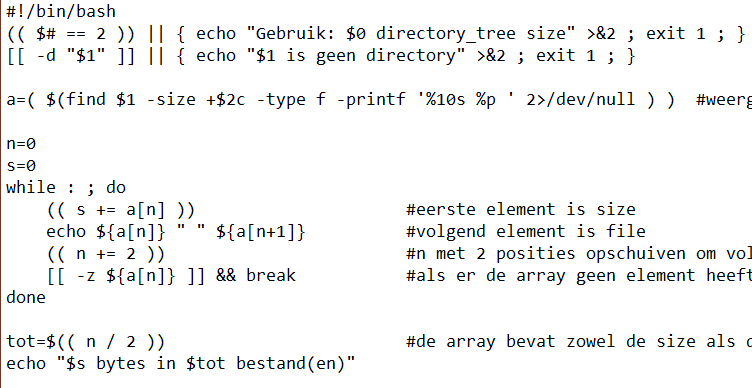
Oef 109



|  |  |
| --- | --- |
| **$#**  **$@** |  |
| **egrep** |  |

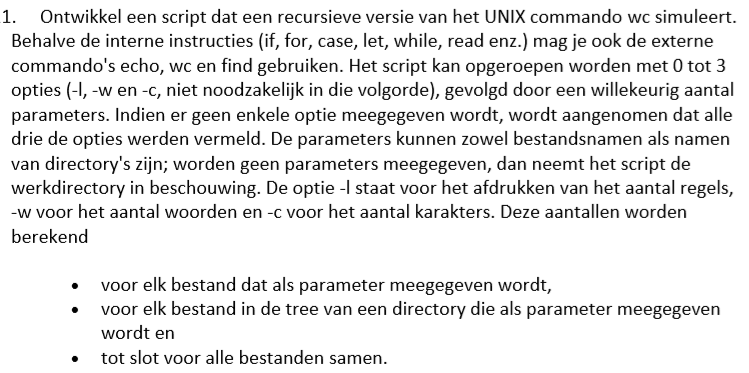
Oef 110

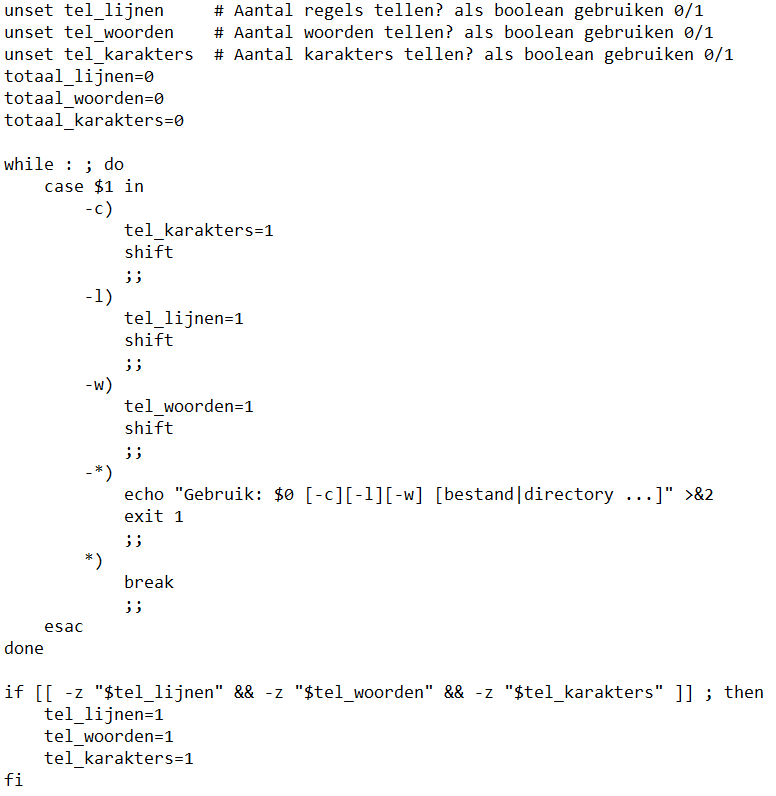


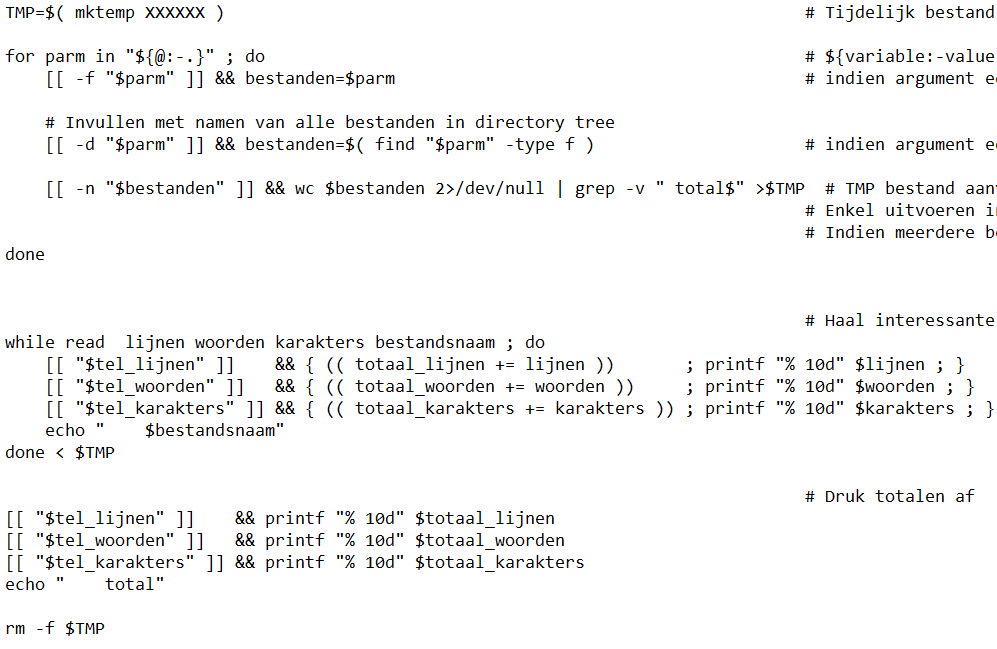


|  |  |
| --- | --- |
| **>&2** | *[n]>&word*  n is default 1   * we are redirecting stdout to file descriptor "2" meaning stderr |
| **a=( $(find $1 -size +$2c -type f -printf '%10s %p ' 2>/dev/null ) )** | *Delimiter*  IFS = default delimiters |
| **:** | = no operation  The colon builtin : is exactly equivalent to true. It's traditional to use true when the return value is important, for example in an infinite loop  It's traditional to use : when the shell syntax requires a command but you have nothing to do |
| **$(( … ))** | = arthmetic expansions  = (( … )) maar met asignment |
| **${array[n]}** | Bij indexering altijd ${} |
| **find** |  |

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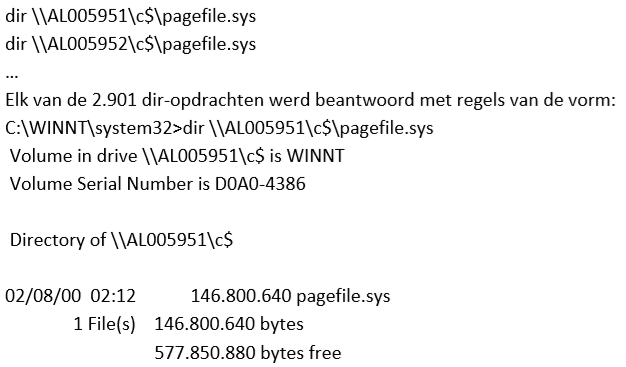


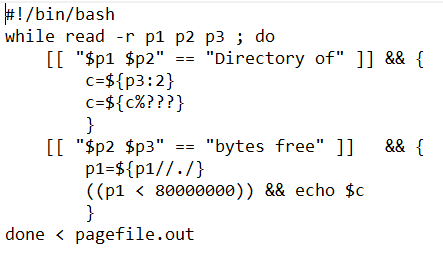




|  |  |
| --- | --- |
| **unset tel\_lijnen**  **unset tel\_woorden**  **unset tel\_karakters**  **totaal\_lijnen=0**  **totaal\_woorden=0**  **totaal\_karakters=0** | Variabelen als boolean gebruiken  0/1 |
| **case** |  |
| **“ “**  **‘ ‘** |  |
| **Volgorde operatoren** | *Zelfde precedence*  Linkse eerst |
| **mktemp** |  |
| **Wc** |  |
| **grep** |  |
| **rm** |  |

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|  |  |
| --- | --- |
| **Read -r p1 p2 p3** | *optie -r*  interpreteerd slashes niet als escape caracters  *read var1 var2 … varN*  hele bestand in variabelen inlezen |
| **[[ … ]]**  **(( … ))** | CONDITIONS  FILE CONDITIONS |
| **${p3:2}**  **${c%???}**  **p1=${p1//./}** | SUBSTRINGS    SUBSTITUTION    LENGTH    DEFAULT VALUES |